

# 1967: Discovery of first pulsar by Jocelyn Bell and Anthony Hewish.



Jocelyn Bell Burnell



Anthony Hewish

## Discovery:

On November 28<sup>th</sup>, 1967, Jocelyn Bell and Anthony Hewish observed pulse emission from the pulsar separated by 1.33 seconds at the same location of the sky.

## Pulsar:

A pulsar is a quickly spinning, highly magnetized neutron star which emits electromagnetic radiations, or light, like a lighthouse.

## Application:

- **Pulsar map:**

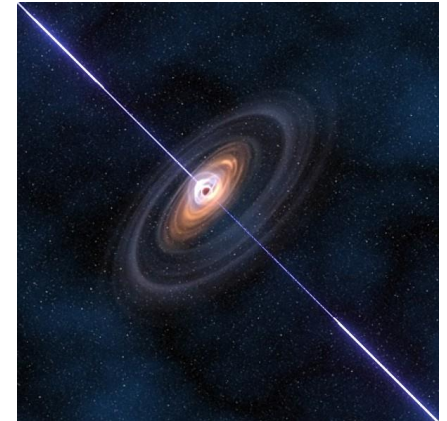
The position of a star relative to different pulsars can be shown by the unique timing of their electromagnetic pulses.

- **Pulsar clock:**

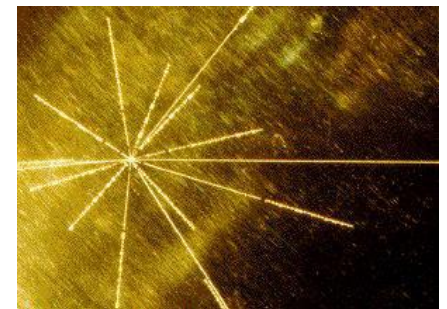
Some millisecond pulsars have more precise regularity of pulsation than atomic clock.

- **Gravitational waves detectors:**

When a gravitational wave pass through, a disturbance will be produced with a particular signature across the ensemble of pulsars, and can be detected.



Pulsar star earth 3d max



The pulsar map of the Sun on Voyager Interstellar Record